



CHEM-NUCLEAR SYSTEMS, LLC

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S. C. PUBLIC SERVICE COMMISSION
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HAND DELIVERY

The Honorable Gary E. Walsh
Executive Director
South Carolina Public Service Commission
101 Executive Center Drive
Columbia, South Carolina 29210

**Re: Report of the Collaborative Review of the
Operations and Efficiency Plan Pursuant to
Public Service Commission Order No. 2003-188
(SCPSC Docket No. 2000-366-A)**

Dear Mr. Walsh:

Please find enclosed for filing, the original and ten copies of the Report of the Collaborative Review of the Operations and Efficiency Plan submitted by Chem-Nuclear Systems, LLC, a Division of Duratek, Inc. We are filing the report pursuant to the Commission's Order No. 2003-188.

As the Certificate of Service to the Report indicates, we have formally served a copy of the report on those parties which S. C. Code Ann. §48-4640(B)(4) (Supp. 2001) and the Commission's rules of practice and procedure designate as parties to this proceeding.

This report resulted from collaborative agreement between the parties during the review of the Operations and Efficiency Plan. While this report is being submitted by Chem-Nuclear, it represents the consensus of the parties as attested by the signatures of representatives of the South Carolina Budget & Control Board, the Atlantic Compact Commission, the Public Service Commission Staff, as well as Chem-Nuclear. SCDHEC and the Consumer Advocate will signify their approval in the form of a letter.

Thank you for your time and attention in this matter. If you have any questions with respect to it, please do not hesitate to contact me.

Very truly yours,

Deborah G. Ogilvie

Deborah G. Ogilvie
Public Information Director

- c: The Honorable Frank Fusco (w/enclosures)
- The Honorable Henry McMaster (w/enclosures)
- The Honorable Elliot Elam (w/enclosures)
- The Honorable C. Earl Hunter (w/enclosures)
- The Honorable M. K. Batavia (w/enclosures)

BEFORE THE PUBLIC SERVICE COMMISSION
OF SOUTH CAROLINA

Docket No. 2000-366-A

IN RE: Report of the Collaborative Review)
of the Operations and Efficiency Plan)
Pursuant to Commission Order No.)
2003-188)
_____)

**CERTIFICATE
OF SERVICE**

I, Deborah G. Ogilvie, do hereby certify that I have this date served one (1) copy of the foregoing Report upon the following statutory parties by causing said copies to be deposited with the United States Mail, first class postage prepaid and addressed as follows:

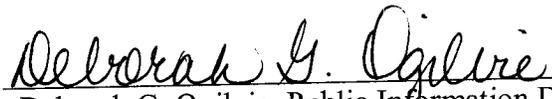
The Honorable Frank W. Fusco
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South Carolina Budget and Control Board
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Columbia, South Carolina 29211

The Honorable Henry McMaster
Attorney General
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The Honorable Elliott Elam
Consumer Advocate
State of South Carolina
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The Honorable C. Earl Hunter
Commissioner
SCDHEC
2600 Bull Street
Columbia, South Carolina 29201

The Honorable M. K. Batavia
Atlantic Compact Commission
1201 Main Street
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Deborah G. Ogilvie, Public Information Director
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June 16, 2003

Columbia, South Carolina

**REPORT OF THE COLLABORATIVE REVIEW
OF THE
OPERATIONS AND EFFICIENCY PLAN
PURSUANT TO
PUBLIC SERVICE COMMISSION
ORDER NO. 2003-188**

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COMMUNICATIONS

SUBMITTED BY CHEM-NUCLEAR SYSTEMS, LLC

June 16, 2003

PURPOSE

On April 14, 2003, the Public Service Commission (Commission) issued Order No. 2003-188. This Order directed Chem-Nuclear Systems, LLC (Chem-Nuclear) to file a statement regarding a collaborative review of the Operations and Efficiency Plan (Plan). Applicable text from the Order is as follows:

After due consideration of this matter, Chem-Nuclear is ordered, prior to June 30, 2003, to file a statement for approval by this Commission regarding a collaborative review of the OEP Plan. All parties in this Docket shall be provided an opportunity to participate in the collaborative review, which shall be chaired by the Commission. Further, the Executive Director shall appoint the appropriate Staff members to be on that review team. The purpose of the review shall be to determine if consensus can be met regarding the validation of the OEP Plan. All parties participating shall be provided with an opportunity to submit comments to the Commission in this matter. However, these comments must be submitted prior to June 30, 2003

In response to the Commission's order, a meeting was held on April 19, 2003, and follow-up meetings were held on May 8 and June 12, 2003. The participants in the collaborative process included:

Public Service Commission	Bruce Duke, Deputy Director, - Meeting Chairman David Butler, Legal Counsel Jim Spearman, Research Department Bill Blume, Audit Department Norbert Thomas, Audit Department
SC Dept. of Health & Environmental Control	John Litton, Director, Division of Waste Management Henry Porter, Asst. Director, Division of Waste Management David Scaturro, Manager, Division of Waste Management

Budget & Control Board	John Clark, Director, Energy Office Bill Newberry, Mgr. Rad. Waste Disposal Program Bob Baird, consultant, URS
Atlantic Compact Commission	M. K. Batavia, P. E., Executive Director
Consumer Advocate	Hana Williamson
Chem-Nuclear	Regan Voit, President Jim Latham, VP Barnwell Operations Bill House, VP Regulatory Affairs Carol Ann Hurst, Controller Deborah Ogilvie, Public Information Director Mark Childs, consultant, Project Time & Cost Greg Dowd, consultant, Project Time & Cost

The Consumer Advocate was invited to participate in the meetings, but could not attend all the meetings due to budgetary constraints and scheduling conflicts. Draft documentation was provided to the Consumer Advocate to keep them apprised of the meetings.

STATEMENT OF CONSENSUS

The parties, after completing a collaborative review of the Plan, reached consensus that the information provided in the Plan is a valid representation of disposal site operations and that the plan can be used as a baseline for establishing a method for determining allowable costs in future Public Service Commission proceedings. The overall validation of the Plan is borne out by the following facts:

- The activities in the Work Breakdown Structure (WBS) are representative of the tasks required to operate the Barnwell disposal site.
- The proven methodologies used to develop the Plan are used and accepted by a number of industries and government organizations.

- The computer programs used in the development of the Plan are widely used and perform the desired functions accurately.
- The consultant to the Budget and Control Board (Baird) independently evaluated the costs for the work elements presented in the Plan.

The parties were able to identify three cost categories (variable costs, fixed costs, and irregular costs) for operating the Barnwell disposal site. The parties also reached consensus on recommendations provided for the Commission's consideration.

COLLABORATIVE REVIEW PROCESS

The first collaborative meeting was held on April 16, 2003. In preparation for the meeting, the Budget & Control Board had their consultant, Bob Baird of URS, review the WBS and cost estimates prepared by Project Time & Cost (PT&C) as part of the Plan. Baird submitted spreadsheets that compared his cost and time estimates with those prepared by PT&C. Review of the information, followed by discussion among the parties, formed the basis for identification of cost categories, which were then narrowed to the final of three. Once each work activity was categorized, then a review of the time estimates and the resulting dollars ensued, with particular emphasis on those activities where the differences were considerable.

By the end of the April 16 meeting, the parties agreed on most of the information in the Plan. It was agreed that the parties would review the remaining differences, and get back together via telephone to discuss the differences and try to reach consensus on them. Following the phone conference, Baird visited the Barnwell disposal site to review how the employees perform certain activities. Using data gathered at that May 7 visit, Baird prepared another spreadsheet for a meeting between the parties on May 8, 2003. The May 8 meeting included a collaborative review of those items upon which the parties had not yet reached consensus, and a review of a draft consensus report outline. A final review meeting was held on June 12, 2003.

OPERATIONS and EFFICIENCY PLAN

Purpose

The Operations and Efficiency Plan (Plan) was prepared in response to Commission Order No. 2001-499, issued June 1, 2001. The Order states, "In any event, we do believe that reductions in fixed and variable costs should result from reductions in the waste stream to the Chem-Nuclear facility. ... To quantify these future cost reductions, Chem-Nuclear shall provide to the Commission an operations and efficiency plan for the Barnwell facility... ." The order goes on to specify the requirements for the Plan. The table below identifies the salient requirements and describes the information provided in the Plan. The Request for Proposal was approved by the Commission in Order No. 2002-1, issued January 7, 2002.

Operations Efficiency Plan (Plan) Matrix		
PSC Order Requirements	Plan Response	Plan Section
Operation and Efficiency Plan prepared by independent qualified party.	After competitive procurement, Project Time & Cost, Inc. was contracted to develop the Plan.	Executive Summary, Page i. 1.0 Introduction, Page 2 of 31.
Identify least-cost operating strategies for future years.	PTC used Activity Based Costing methodology to assess operations, develop cost estimate, and then develop the Plan. Operational cost projections for FY 2004 through FY 2009 show decreases in total costs over time.	4.0 Methodology, Page 5 of 31. 5.1 Operational Cost and Labor Projections, Page 15 of 31.
Personnel requirements for disposal services.	Labor projections for FY 2004 through FY 2009 show decreases in total labor over time.	5.1 Operational Cost and Labor Projections, Page 15 of 31.
Optimal vault and trench configurations.	In addition to the assessment of current vault and trench designs, alternative trench designs were evaluated by the PTC and Law Engineering and Environmental Services, Inc. A "per vault" cost comparison of the current and alternative designs was performed.	5.2 Trench Analysis, Page 16 of 31. Optimal Vault and Trench Configuration, Appendix B.
Review and appropriate evaluation of the work conducted by Mr. Bede.	It was concluded from review of Mr. Bede's direct and surrebuttal testimony to the Commission that the differences between the Richland, WA and Barnwell, SC facilities are substantial which make direct comparisons difficult.	5.3 Analysis of Bede Testimony, Page 19 of 31.

Plan Overview

In preparing the Plan, PT&C used an Activity Based Costing (ABC) method to develop a structured approach to costs associated with operating the Barnwell disposal site. The structured approach provided by the Plan allows all parties concerned to view present and future disposal site operations in a logical, organized manner. The WBS provided in the Plan presents the complete set of work activities required to operate the disposal site in logical and orderly groupings to facilitate cost estimating. Future use of a WBS structure like the one presented in the Plan would be a key element in creating detailed tracking, reporting and controlling of costs associated with operation of the disposal site. The structure provided by the Plan will also assist all parties in evaluating future costs against a standard of reasonable and prudent.

ABC Process Background

The ABC concept has been in use for decades. Its roots can be traced back to 1908 when Alexander Hamilton Church (Church was one of the more influential people in the accounting practice in the late 1800s) noticed how indirect expenses frequently amounted to 100% or more of direct wages. He suggested the use of special pools in assigning overhead costs to individual work elements. In the 1920s and 1930s many companies used ABC in allocating expenses associated with advertising, promotion, and distribution expenses. In the early 1960s General Electric started to look at activities that “caused” costs.

Currently, ABC has been utilized by the private sector, many Federal agencies, and state governments to assist them in capturing, understanding and analyzing costs. PT&C has used the ABC methodology in developing estimates for the US Department of Defense (DOD), the Department of Energy (DOE), the US Army Corps of Engineers (USACE), and other Federal clients.

Work Breakdown Structure (WBS)

A WBS is a hierarchical breakdown of work that organizes and defines the scope of an organization, project, or other undertaking. Each descending level in a WBS represents an increase in the level of definition of the work. Work is effort performed by people to transform, create products or to provide services that meet specified objectives. Just as the organization

hierarchically structures the people who perform work, so the work breakdown structure hierarchically structures the products or services to be produced and on which the people work.

The Plan WBS was constructed based on the way work is accomplished at the Barnwell disposal site and was not developed to define a group or department on the site. The initial objective was to provide a common framework to support scope development and definition, resource assignment, cost type identification, cost distribution, and cost analysis. In the long term the WBS can be used to support planning, budgeting, performance tracking, scenario analysis, and other management activities.

PT&C used an interactive process to develop the Plan WBS structure. PT&C began by visiting the Barnwell disposal site to learn about the Chem-Nuclear operation through observation of activities, document reviews, and interviews with employees. After PT&C developed the initial draft WBS structure, representatives returned to the Barnwell disposal site and presented the product to Chem-Nuclear management. Refinements were incorporated into the draft WBS and the final WBS structure was established. At this point, the WBS was not defined throughout the hierarchy; the lower level portions were defined and developed as part of the ABC process.

Plan Software

The Plan was developed using standard software applications (Word and Excel) from Microsoft and a software package developed by Building Systems Design, Inc (BSD) known as Composer Gold. Composer Gold is the commercial version of a software package also known as MCACES (Micro Computer Assisted Cost Estimating System) by the Federal government. This software package was designed in the late 1980's for construction cost estimating applications; therefore it is very flexible in parameter set-up and reporting capabilities. The MCACES software is used by the USACE and the DOD as the detailed estimating arm of the Tri-Service Automated Cost Estimating System (TRACES). The DOD, DOE, and Environmental Protection Agency (EPA) all use the MCACES software and require their contractors to use it on their projects. Through its long history and extensive use, the calculational functions of this software have been validated.

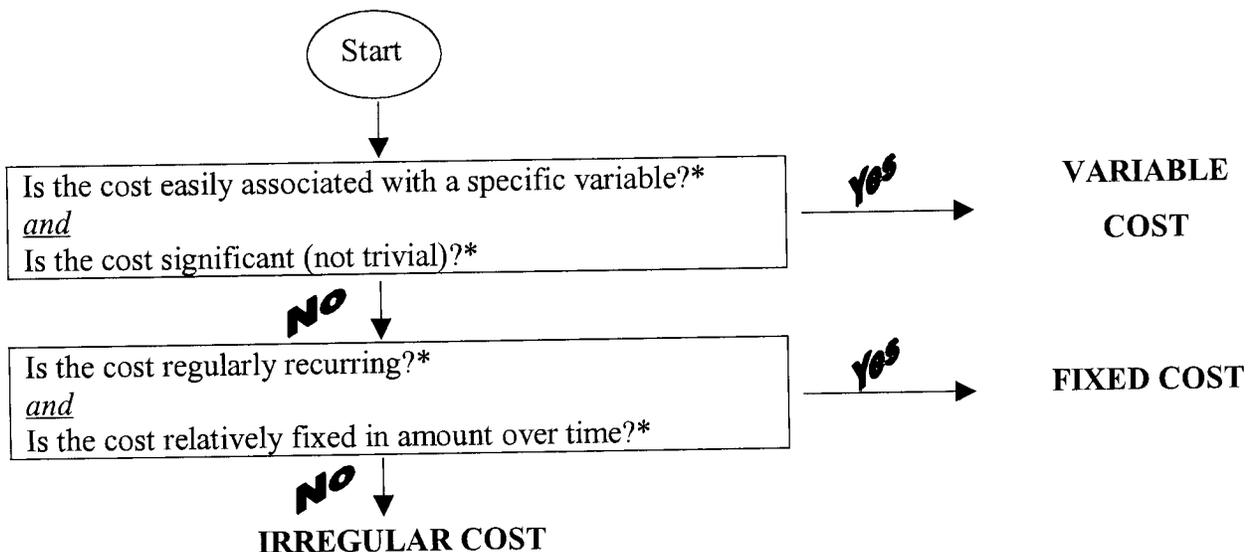
The parties agreed that the Plan ABC process provides a structure for a rigorous, disciplined and thorough evaluation of costs associated with disposal site operations. The parties agreed that the Plan established a good basis for identifying the costs of operating the Barnwell disposal site and the types of costs (fixed, irregular and variable).

Cost Categories

A spreadsheet of Barnwell disposal site costs was developed to tabulate the estimate. The WBS elements identified each activity and the associated cost type, expense category, and dollar estimates were included.

The Plan identified seven cost types, some of which are facility-specific and some could be seen as overlapping from one category to another. Through the collaborative review discussions, it was determined that three generic cost types represent all the WBS elements. A working definition in the figure below was developed and used to classify each of the costs as variable, fixed, or irregular. Fixed costs are regularly recurring and relatively constant over time. Variable costs are readily associated with a specific variable and change as the variable changes. Irregular costs occur on an intermittent basis and cannot be easily associated with a specific variable.

WORKING DEFINITIONS FOR PURPOSES OF COST CLASSIFICATION



*The two questions in each box establish qualitative tests and should be considered together. For example, if the cost is obviously and directly associated with an easily measurable variable (Box 1, Q1),

then the magnitude of the cost (Q2) is less important in determining whether it is a variable cost. Similarly, if the cost is huge (Q2), then it can still be a variable cost even though its association with a measurable variable is not as obvious and direct as some others (Q1).

Fixed Costs

The majority of the costs of Barnwell disposal site operations are fixed costs. Elements such as health and safety, security, licensing, environmental monitoring, training, administration, QA/QC, finance/accounting, human resources, continue independent of the amount of waste arriving at the site. Fixed costs may change over time due to pay raises or supplier increases which are beyond control of the site operator.

The parties agreed that the costs identified as fixed costs would not change significantly with changes in waste volumes received. Independent review of the fixed costs required to operate the Barnwell disposal site was performed by Baird using the Plan WBS, and the two estimates agreed by about 5% (\$293,356) as a result of collaborative discussions among the parties since April this year. The annual audit by the Commission staff should find little change in these fixed costs through the years. The parties agreed that the fixed costs identified in the Plan and independently checked by Baird are valid and reasonable. The parties agreed that travel costs, agency liaison costs and marketing costs deserve increased attention in future proceedings. While the parties agreed to classify these costs as fixed costs at this time, it was noted that changes in market conditions for waste disposal and processing, as well as other factors, might affect the level of effort necessary in these specific areas. Appendix A lists the Plan fixed costs.

Variable Costs

The variable costs include certain materials costs and certain labor costs directly associated with the receipt and disposal of waste. The parties agreed that the costs identified as variable costs will likely decrease as the amount of waste received each year decreases in accordance with the Atlantic Low-Level Radioactive Waste Compact Implementation Act. The parties agreed that the methods already established by the Commission staff for determining the variable material cost rates (i.e., costs for concrete disposal vault purchases and trench amortization) are reasonable and appropriate and should remain in effect. Trench amortization

has been a method used to spread the cost of trench construction proportionally into a “per vault basis” so that part of the construction costs is assigned to each vault as it is used for the disposal of waste. As a result of the collaborative review process, the parties established variable waste dependent labor costs using information in the Plan.

Variable Material Costs

Several factors may affect the variable material costs each year. These factors include the cost of each type of vault, the number of each type of vault used, the amount of trench space used (determined by the size, shape and type of waste container received, and the number of vaults used in each trench). The following paragraph describes the method used over the past three years to establish a variable material cost rate for vaults and trench amortization.

The method established for determining variable costs rates for vaults and trench amortization involves examination of the volume of waste received by waste classification (Class A, Class B, Class C, and slit trench volume) and the volume of each waste classification disposed of in each respective trench.

The total cost for vaults used in a trench plus the total cost of trench amortization divided by the total waste volume disposed in each trench provides a variable cost rate by trench. This variable cost rate for each trench multiplied by each waste classification volume yields a variable cost by trench by waste classification. The sum of these variable costs by trench for each waste classification provides the total variable cost for each waste classification. This amount divided by the respective waste classification volume yields a variable cost rate by waste classification.

The variable cost rate for each waste classification (Class A, Class B, Class C and all slit trench waste) multiplied by the volume of waste received in that classification can be used each year in a prospective manner to establish the total variable material costs associated with disposal vaults and trench amortization. Actual costs greater than the amounts calculated using these rates are the subject of additional justification in the application and audit process. If the variable material costs are less than the amount calculated, Chem-Nuclear only requests the lower actual costs be identified as allowable costs for the affected year. As a matter of simplification, the Commission staff recently recommended trench construction costs be incurred and expensed when the trench is constructed rather than amortized over use of the trench. For

newly constructed trenches this accounting practice has been adopted. For older trenches, the amortization method had to be retained.

Variable Waste Dependent Labor Costs

Variable waste dependent labor costs are included in the activities directly associated with waste acceptance, inspection, and disposal. While the volume of waste in various classifications has been useful in establishing variable cost rates for the material costs associated with vaults and trench amortization, collaboratively the parties agreed that variable labor rates could be more appropriately developed for specific work activities based on the following independent variables related to the amount of waste received for disposal:

- number of vaults used for disposal of waste
- number/type of shipments (vans, vertical casks, horizontal/slit trench casks)
- number of waste containers received

The labor costs associated with certain activities defined in various WBS elements described in the Plan are directly related to the amount of waste received as measured or indicated by one of these independent variables. The parties further agreed that the labor rates for a specific WBS activity or a group of WBS elements should be based on different independent variables.

Labor directly associated with each disposal vault includes inspection and handling. The concrete disposal vaults are fabricated by the supplier at a facility near the disposal site. Each vault has a unique serial number and is inspected by the site operator to ensure compliance with the approved drawings and specifications. The supplier delivers the acceptable vaults to a holding area adjacent to the disposal site. The site operator transfers the vaults to the disposal site and places them into the respective trenches as needed for offloading waste packages. The inspection and placement of vaults are similar regardless of vault type.

The type shipment is a better indicator than waste volume of the amount of labor costs involved in disposal of the waste received. For example, a vertical cask shipment could contain as little as one 55-gallon drum (7.5 cubic feet of waste volume) or as much as a 200 cubic foot liner of waste. In either case, approximately the same amount of labor cost could be incurred with activities such as receipt of the shipment, preparation of the cask for offload, offload and survey of the cask, and release of the cask and its trailer. While there is a variation in the amount of labor associated with different designs of casks, the overall labor costs for vertically offloaded

casks tend to be about the same. Similarly the labor required to offload a shipment of van loaded waste can vary, but many of the same activities are required regardless of the waste volume in that van shipment. Therefore using the number of shipments received is a more realistic independent variable on which to base variable labor costs than waste volume alone.

Horizontal cask shipments (slit trench offloads), on the other hand, require significantly more labor and handling considerations because of the high dose rate/high curie content waste shipped in these casks. The volume in these shipments is typically about 57 cubic feet and is clearly not proportional to the labor costs incurred to offload a slit trench shipment safely. The parties therefore chose to treat the number of horizontal cask shipments as a separate independent variable.

Each shipment is scheduled well in advance of arrival at the disposal facility. Shipment identification numbers are issued after receipt of waste information required for acceptance due to waste volume restrictions, waste approval requirements, and required regulatory notifications. Reporting to waste shippers and SC Department of Health and Environmental Control (DHEC) is required to confirm receipt. Most of the shipments require some type of waste form or other technical review by the site operator and about half of the shipments require an approval from DHEC. For example, all Class C shipments require DHEC approval. While there is a variation in the amount of labor associated with different shipment notifications and different waste approvals, the average labor costs for each shipment tends to be about the same. Therefore, it was agreed that the total number of shipments is the most appropriate variable for determining labor rates for these activities.

The disposal site license and regulations require detailed information be maintained on waste disposed at the site. The data is entered into the trench records database on the waste container level. The quantity of each radionuclide in each container, along with the waste class, waste description, container dose rate, volume, and the generator information is entered into the waste database. In the case of waste from processors and brokers, there can be multiple generators with multiple waste forms in the same container. Also, individual generators can have multiple waste forms in the same container. The data is tracked and entered on the sub-container level for each waste form and generator included. Since there is no straightforward

way to project or track the waste container subdivisions, the number of containers was agreed to be the most appropriate variable to determine labor rates for these activities.

Variable Waste Dependent Labor Rate Development

The Plan provides labor costs for WBS elements associated with a 70,000 cubic foot maximum waste volume scenario for fiscal year 2002/2003. The Plan also provides certain parameters or independent variables for this maximum volume scenario as indicated in the following table.

Fiscal Year	Maximum Volume	Total Shipments	Slit Trench	Cylindrical Vaults	Rectangular Vaults	Total Vaults
2002-2003	70,000 cu.ft.	562	12	448	82	542

Using actual data for a recent 18-month period (July 1, 2001 through December 31, 2002) as a comparison allowed for the development of appropriate additional independent variable values for the 70,000 cubic foot maximum scenario. The actual data for this 18-month period is summarized in the following table:

Shipment Type	Number of shipments	Volume (cubic feet)	Number of containers
Vans	164	21,671.1	975
Vertical Casks	434	55,639.04	586
Slit Trench (Horizontal Casks)	17	972.80	17
Total	615	78,282.94	1578

The following table uses the total number of shipments identified in the Plan (Table 4.2.2) for the maximum volume scenario for fiscal year 2002/2003. The number of containers and shipment types were ratioed from the actual 18-month values to the 70,000 cubic foot maximum volume scenario. For the purpose of determining variable waste dependent labor rates for certain activities, a combination of the Plan data and the developed independent variable values was used. The WBS variable labor elements are identified in the Plan. This table also

summarizes the variable waste dependent labor rates and the five independent variables developed using the 70,000 cubic foot maximum volume scenario for fiscal year 2002/2003.

WBS #s	Summary Description	Independent Variable	Cost (from PLAN)	Units of independent variable	Variable Labor Rate
5.11 and 07.03.02	Vault Labor	Total vaults	\$28,115	542 vaults	\$51.87 per vault
07.03.03	A, B&C Waste	Total shipments less slit trench	\$425,652	550 shipments	\$773.92 per vertical cask or van shipment
07.03.06 and 11.01.01	Slit Trench	Horizontal shipments	\$69,859	12 horizontal shipments	\$5,821.58 per horizontal shipment
07.03.05 and 9.02	Waste Acceptance	Total shipments	\$94,019	562 shipments	\$167.29 per shipment
07.03.04	Trench Records	Containers	\$41,747	1448 containers	\$28.83 per container

Starting in fiscal year 2003/2004, the Costpoint accounting system will be used to collect data in each of these variable cost categories to compare actual variable labor costs to the costs predicted by these rates based on Plan data. Prior to this time the accounting system was not structured in a way that actual data could be collected in these categories.

Other Variable Costs

The Plan describes other variable costs (Atlantic Compact Commission surcharges, payments to the Decommissioning Trust Fund and the Perpetual Care and Maintenance Fund). These costs are established on a per cubic foot basis and are included in the statutory requirements for operating the disposal site.

Irregular Costs

Through collaborative review, the parties identified some costs that tend to be irregular as defined above. Examples of ongoing irregular costs include trench construction, license renewal, large component disposal, insurance premiums, and surface water management improvements.

The parties agreed that the site operator cannot always forecast the costs identified as irregular as part of the annual application process. For those irregular costs that can be reasonably predicted as a result of a known and measurable effect, the Commission may identify them as allowable for the years in which they will be incurred. However, for those irregular costs that cannot be adequately forecasted in the application, the site operator will request reimbursement with the allowed operating margin for those costs in the next application prepared after the expense is incurred. Irregular costs can be tracked and controlled separately and are easily audited by the Commission staff in their annual audit.

USE OF THE OPERATIONS AND EFFICIENCY PLAN

The Plan provides a structure for managing, analyzing and communicating information about costs associated with operating the Barnwell disposal site. The WBS section with its hierarchical structure and cost detail provides a framework to align the company's accounting system to collect annual costs at a level of detail to allow better analysis. For fiscal year 2003/2004 and beyond, the accounting system can be aligned to accumulate costs in categories of fixed, variable, and irregular costs consistent with agreements reached during the collaborative review. The Plan also provides a logical method to communicate the various categories of costs incurred in operation of the Barnwell disposal site.

The method for determining waste-dependent labor rates resulting from this collaborative effort is a good approach. The parties participating in development of this approach request the Commission use this method for determining allowable waste dependent labor costs for fiscal year 2003/2004 and beyond. Changes in the low-level radioactive waste disposal market or regulatory changes could cause the rates established by this collaborative effort to not accurately forecast costs. If such a situation were to occur, one or more of the parties would request a waste dependent labor rate change in accordance with S.C. Code Ann. 1976 Section 49-46-40(B)(4)(supp. 2002). A combination of the Plan structure and actual costs would form the basis for such a request.

RECOMMENDATIONS OF THE PARTIES

Through the collaborative review process and use of the Plan, the parties identified and developed four recommendations for the Commission's consideration.

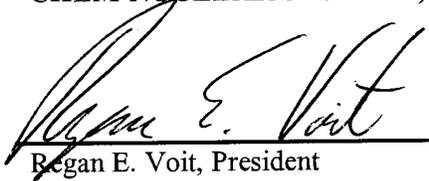
1. The parties established that the cost categories identified as "fixed costs" in Appendix A are valid. Therefore, the parties recommend that the Commission allow the operating company to be reimbursed only for the actual dollars spent plus, where applicable, the statutory operating margin for each of these identified fixed costs. The annual audit by the Commission staff will verify the actual costs incurred each year. The parties feel that the Commission staff should find little change in these costs through the years. For fiscal year 2003/2004 the parties recommend that the Commission, in its order, identify fixed costs based on the Plan costs adjusted for inflationary effects and corrected for the current fringe rates. This adjustment is recommended because the Plan used 2002 dollars and previously approved fringe rates.
2. The costs identified by the parties as "variable costs" will vary with the amount of waste, type of shipments, and the number of containers received at the Barnwell disposal site each year as described above. The variable costs associated with the amount of waste receipts include materials and waste dependent labor.
 - a. The parties recommend that the Commission continue to use the previously accepted method of establishing material rates by waste classification for vault purchases and trench amortization. The Commission staff can audit the costs incurred for materials and recommend that the Commission allow the operating company to be reimbursed only for the actual dollars spent plus, where applicable, the statutory operating margin.
 - b. The costs identified by the parties as variable waste dependent labor costs vary with the amount of waste received at the Barnwell disposal site. The parties recommend that the Commission establish the labor rates associated with each vault, van waste shipment, cask waste shipment, slit trench waste shipment, total shipments, and total containers received at the Barnwell disposal site. For fiscal year 2003/2004, the parties recommend

that the Commission identify waste dependent labor rates based on costs from the Plan costs adjusted for inflationary effects and corrected for the current fringe rates. This adjustment is recommended because the Plan used 2002 dollars and previously approved fringe rates. The Commission staff can audit the costs incurred for labor and recommend that the Commission allow the operating company to be reimbursed in accordance with those rates plus the statutory operating margin. The operating company will project the level of activity the Barnwell disposal site is expected to experience in any given year based on market conditions and the maximum waste receipts allowed by the Atlantic Compact Act.

3. The costs identified by the parties as “irregular costs” are likely to be different each year. Sometimes these costs can be included in the operating company’s annual application. In those cases, the parties recommend that the Commission allow the operating company to be reimbursed only for the actual dollars spent plus, where applicable, the statutory operating margin for each of these identified irregular costs. The irregular cost estimate in the application should be included in the Commission’s Order that authorizes allowable costs for a given fiscal year. When an irregular cost occurs during the year but before the annual Commission staff audit is completed, the Commission staff can audit the costs incurred and recommend that the Commission allow the operating company to be reimbursed only for the actual dollars spent plus, where applicable, the statutory operating margin for each of those identified irregular costs. If an irregular cost occurs after the Commission staff’s annual audit, then the operating company would include that cost in the next annual application for consideration by the Commission as an allowable cost at the next hearing.
4. Operating efficiencies are important to cost reduction efforts. The parties agreed that Chem-Nuclear Systems should continue efforts to improve efficiencies in all aspects of operations.

SIGNATORY PAGE

CHEM-NUCLEAR SYSTEMS, LLC


Megan E. Voit, President

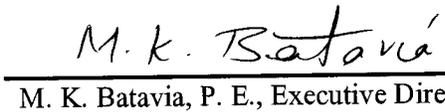
June 13, 2003
Date

SOUTH CAROLINA BUDGET &
CONTROL BOARD


Frank W. Fusco, Executive Director

6/13/03
Date

ATLANTIC COMPACT COMMISSION


M. K. Batavia, P. E., Executive Director

June 13, 2003
Date

PUBLIC SERVICE COMMISSION STAFF


Bruce Duke, Deputy Director

6/13/03
Date

**REPORT OF COLLABORATIVE REVIEW
OF OPERATIONS AND EFFICIENCY PLAN**

APPENDIX A

BARNWELL OPERATIONS FIXED COST SUMMARY

<u>WBS Designation</u>	<u>Description</u>	<u>OEP Annual Cost (\$)</u>
01.01.01	Accounting Period Closing	\$48,236
01.02.01	Quarterly State Reports	\$2,187
01.03.01	Application to PSC	\$5,542
01.04.01	Division Budget	\$15,646
01.05.01	Hearings & Interrogatories	\$19,035
01.06.01	Audits (PSC, KPMG)	\$7,316
01.07.01	Misc Fin & Acct Activities	\$25,730
01.08.01	Accounts Payable	\$32,940
01.09	Billing Activity	\$55,462
01.10	Collections	\$18,245
01.11	Purchasing	\$36,216
02	Human Resources (Routine)	\$70,371
03	Information System Administration	\$50,211
04	H P Training	\$5,575
05	QA/QC	\$106,405
06	Site Equip Maintenance	\$126,034
07.01.02	Site Maintenance	\$145,347
07.01.03	Radiation Protection Program	\$173,445
07.02.01	Environmental Monitoring	\$409,740

<u>WBS Designation</u>	<u>Description</u>	<u>OEP Annual Cost (\$)</u>
07.02.01.02	Personnel Dosimetry	\$25,160
08.01	Public Outreach	\$34,688
08.02	Agency Liaison	\$163,809
08.03	Marketing & Sales	\$152,676
08.04	Business Administration	\$221,297
09	Licensing	\$87,445
10.01	Safety Program	\$37,830
10.02	Safety Review Board	\$64,236
10.03	EH&S Compliance Activities	\$7,912
11.01	Capital Facility Operations Direct Costs	\$655,701
11.02	Capital Facility Operations Indirect Costs	\$597,945
11.02.08	Mgmt Fees/G&A Allocation	\$686,000
11.02.09	Amortization of Deferred Costs (Operating Rights)	\$625,000
11.03	Taxes, Licensing & Permit Fees	\$800,694
12	Security	\$226,891
	Grand Total	\$5,740,965